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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,673	12/28/2001	Chien-Hsing Li	0941-0387P	3681

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EXAMINER

COLAIANNI, MICHAEL

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 07/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/028,673	LI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Michael P Colaianne	1731	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 December 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 10-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All   b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-9, drawn to a display element, classified in class 428, subclass 428.
- II. Claims 10-23, drawn to a method of encapsulating a display element, classified in class 65, subclass 33.5.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product can be made by another and materially different process, such as one that involves placing the layered glass sandwich in a furnace to melt the glass frit to form the bond.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

During a telephone conversation with Joseph Muncy on June 26, 2003 a provisional election was made with traverse to prosecute the invention of Group I,

claims 1-9. Affirmation of this election must be made by applicant in replying to this Office action. Claims 10-23 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 refers to "the rim" which lacks antecedent basis within the claim.

Claim 2 refers to the sealing layer including spacers "in frit." This is deemed to be confusing because it is not clear if the frit recited in claim 2 is in addition to the frit mentioned in claim 1 or whether the frit in claim 2 is the same frit of claim 1. The confusion with frit applies to claim 3-4.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by  
Kadowaki et al. 5693111.

Kadowaki et al. teach forming a sealed glass envelope for a display device using a glass frit bonding layer along the rim of a glass cap and joining the glass cap with a glass substrate having a luminescent body thereon (col. 1, lines 5-21, col. 3, lines 8-17; the anode coating on the glass serves to produce the image (i.e. luminescence) for the display. Thus the anode may be deemed to be a “luminescent body”).

Kadowaki et al. also teach using spacers in the glass frit (Fig. 8(d)).

Kadowaki et al. also teach forming a rib structure on the bottom surface of the glass cap and the sealant surrounding the rib structure (Fig. 8(d), ref. no. 6, 4; the rib structure is formed by spacer 6 and inner part of the frit 4 and is surrounded by the sealant 4 on the outer part of the seal).

Kadowaki et al. also teach the frit forms part of the rib structure (Fig. 8(d), ref. no. 6 and 4; the rib structure is formed by spacer 6 and inner part of the frit 4).

Kadowaki et al. also teach the rib structure is made of ceramic materials (Fig. 8(d) ref. no. 6 and 4 and col. 3, lines 15-17, the glass beads and glass sealant are ceramic materials).

Kadowaki et al. also teach a concavity formed on the glass cap and positioned corresponding to the luminescent body (Fig. 8(b), ref. no. 4, 2 and 1; the glass cap 2 and the frit 4 form a concave body which is then positioned over the luminescent anode surface 1).

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Wilson 3778126.

Wilson teaches forming a sealed glass envelope for a display device using a glass frit bonding layer along the rim of a glass cap and joining the glass cap with a glass substrate having a luminescent body thereon (Figure 2, ref. no. 4, 2, 1 and col. 4, lines 25-51, 65-68, the "illuminatable cross points" are deemed to be a luminescent body).

Wilson also teaches using spacers in the glass frit (Fig. 2 & 3, ref. no. 8 and 4, the spacers are sealed in the glass frit).

Wilson also teaches forming a rib structure on the bottom surface of the glass cap and the sealant surrounding the rib structure (Fig. 2 & 3, ref. no. 4 and 8; the rib structure is formed by spacer 8 and is surrounded by the sealant frit 4 on the outer part of the seal).

Wilson also teaches the frit forms part of the rib structure (Fig. 2 & 3, ref. no. 4 and 8; col. 4, lines 42-51, all the glass parts must be of similar properties which inherently means that the glass spacer properties must be similar to glass frit. Also, the spacer 8 and the frit 4 meld together such that the spacer becomes part of the ).

Wilson also teaches the rib structure is made of ceramic materials (Fig. 2 & 3, ref. no. 8 and 4 and col. 4, lines 42-51, the glass beads and glass sealant are ceramic materials).

Wilson also teaches a concavity formed on the glass cap and positioned corresponding to the luminescent body (Fig. 2 and 3, ref. no. 8, 4, 2 and 1; the glass cap 2 and the frit 4 form a concave body which is then positioned over the luminescent surface 1).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadowaki et al. 5693111.

Kadowaki et al. teach applicant's claimed method. See the 102(b) rejection above for Kadowaki et al.'s teachings. However, Kadowaki et al. do not teach using the display element with an OLED, PLED device or the luminescent body being laminated with an anode layer, organic luminescent layer and a cathode layer.

However, Kadowaki et al. do teach that the sealed glass envelope can be used in any display device (col. 1, lines 6-12). Thus, using the glass sealed envelope in an OLED or PLED device, or with a luminescent body having an anode layer, organic luminescent layer and cathode layer, is deemed to be obvious given Kadowaki et al.'s teachings.

It would have been prima facie obvious at the time the invention was made to use Kadowaki et al.'s glass sealed envelope with an OLED or PLED device or a luminescent body having an anode, cathode and an organic luminescent layer because Kadowaki et al. teaches that the glass envelope can be used with any display device where the interior of the device is to be maintained at a particular atmosphere or vacuum (col. 1, lines 6-12).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P Colaianni whose telephone number is 703-305-5493. The examiner can normally be reached on Monday to Thursday and alternate Fridays from 9:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 703-308-1164. The fax phone numbers



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for the organization where this application or proceeding is assigned are 703-305-7115 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

A handwritten signature in black ink, appearing to read "Michael P. Colaianni". The signature is fluid and cursive, with a long horizontal stroke at the end.

Michael P Colaianni  
Primary Examiner  
Art Unit 1731

MPC  
July 2, 2003

**MICHAEL COLAIANNI  
PRIMARY EXAMINER**